Executive Summary

North Carolina's economy is in transition. As manufacturing jobs in traditional industries decline, new opportunities for job creation must be identified and aggressively pursued. Few sectors offer as much promise for long-term, sustained community development and job creation as the relatively young field of biotechnology. Few states are as well positioned as North Carolina for national and international leadership in biotechnology and economic gain from the industry's growth.

Often described as a single industry, biotechnology more accurately refers to the large and growing array of scientific tools that use living cells and their molecules to make products and solve problems in many different industries. Agriculture, human and animal health care, forestry, the environment, and specialty chemicals are among the industries that have benefited most from biotechnology.

The economic promise of biotechnology is extraordinary. At present a $40 billion sector worldwide, it is estimated to become a market of at least $120 billion annually within 10 years. North Carolina companies, already creating about $3 billion in annual biotechnology revenue, can grow in number, employees, and revenues — if provided the right resources and environment.

The benefits of biotechnology to North Carolina — and the world — are clearly not limited to jobs and other forms of economic development. Biotechnology products are profoundly improving the crops we grow, the food we eat, the medicines we take, the environment in which we live, and the everyday products we use.

A strong foundation

North Carolina has a strong base on which to expand biotechnology science, companies, and economic return. In the early 1980s, visionary State leaders established a structure and a long-term commitment for biotechnology innovation and commercialization. North Carolina recognized early that the science and applications of biotechnology fit remarkably well with its natural resources and economic foundations. A technology based on living organisms is well suited for a place strong in agriculture, native plants, marine resources, forestry, food, pharmaceuticals, and manufacturing. To ensure a coordinated and innovative approach to biotechnology development, the State established the North Carolina Biotechnology Center — the first state-sponsored biotechnology initiative in the United States.

Over the last two decades, the Biotechnology Center has carefully targeted its funding to the requirements of biotechnology development: science and research, education and workforce training, and company establishment and growth. Programs and activities have assisted but not duplicated the efforts of various public and private entities involved in biotechnology, from universities and entrepreneurs to investors and start-up companies. Twenty years of strategic investment have paid off handsomely; North Carolina has deliberately and